

**TABLE 5.2.13.2–2.—Planned Projects Under the No Action Alternative and Associated Waste Projections**

<b>Project Title</b>	<b>Project Description<sup>a</sup></b>	<b>Expected Waste Streams and Quantities</b>
BioSafety Laboratories (multiple projects)	Modifications to Buildings 132, 151, 153, 154, 190, 235, 241, 281, 432, 435, 446, T1527, T8545, and T4352.	No changes to routine waste generation. Construction debris accounted for in 93-200 tons of debris per year estimate. New operation would be expected to generate (total all waste categories 500-1,000 lb/yr, assumed minimum of 1 metric ton, 0.5-1 m <sup>3</sup> /metric ton) Hazardous: 0-1 metric tons/yr (including biohazardous) Municipal solid waste: 0-1 metric tons/yr
Terascale Simulation Facility	Computers required to meet Strategic Computing Initiative.	New operation, not expected to generate hazardous, radioactive, or mixed waste.
D&D U325 Cooling Tower	An old LLW cooling tower to be removed.	No changes to routine waste generation. Several tons of debris would be disposed. Building is part of 700,000 ft <sup>2</sup> of excess properties to be removed. Potential for nonroutine TSCA waste.
D&D Building 222	22,000 ft <sup>2</sup> will be removed.	No changes to routine waste generation. 145 tons of debris would be disposed. Building is part of 225,000 ft <sup>2</sup> of excess properties to be removed. Potential for nonroutine TSCA waste.
D&D	Building 177 AVLIS legacy facility; 13,000 ft <sup>2</sup> will be removed.	No changes to routine waste generation. Up to 6,000 tons of debris. More than 5,000 tons would be recycled. D&D work would include a total of 85 tons of debris for disposal. Hazardous: 0-1 metric tons LLW: 10-20 m <sup>3</sup> /yr MLLW: 0-1 m <sup>3</sup> /yr TRU: 0 Municipal Solid Waste: 13-60 metric tons/yr. Building is part of 700,000-ft <sup>2</sup> of excess properties to be removed. Potential for nonroutine TSCA waste.
Remove and Replace Offices	Modular offices for 100 to 130 personnel removed per year.	No changes to routine waste generation. Assuming 25,000 to 30,000 ft <sup>2</sup> removed, 200 tons of debris would be disposed. Buildings are part of 255,000 ft <sup>2</sup> of excess properties to be removed. Potential for nonroutine TSCA waste. Construction of 25,000 to 30,000 ft <sup>2</sup> building would result in an estimated 50-60 tons of construction debris.
Site 300 Wetlands Enhancement	Mitigation ponds to replace ATA cooling tower.	None. Excess soil will be used in vicinity.
Tritium Facility Modernization	Renovation and modernization of Building 331.	No net change in routine waste generation as increases in programmatic activities are expected to be balanced by consolidation and other improvements. Construction wastes would be expected, approximately 2 tons/1,000 ft <sup>2</sup> .
Site 300 Revitalization Project	Convert S300 to Hetch –Hetchy.	Only construction debris.
Building 292 Cleanup	Clean up T2 contaminated target and machine rooms.	No changes to routine waste generation. Wastes would be considered nonroutine.

**TABLE 5.2.13.2–2.—Planned Projects Under the No Action Alternative and Associated Waste Projections (continued)**

<b>Project Title</b>	<b>Project Description<sup>a</sup></b>	<b>Expected Waste Streams and Quantities</b>
Reclassify Building 446 as BSL-2 Facility	Facility Reclassify entire building to BSL-2 standard.	New operation would be expected to generate: Hazardous: 0-1 metric tons/yr (including biohazardous) LLW: 0-1 m <sup>3</sup> /yr MLLW: 0-1 m <sup>3</sup> /yr TRU: 0 Municipal Solid Waste: 0-1 metric tons/yr
Engineering Technology Complex Upgrade	Modifications to Building 321 to meet seismic standards, improve space utilization, and add new high precision machine and inspection equipment.	Due to modernization and consolidation, routine waste generation would be expected to decrease. Construction wastes would be expected Approximately 2 tons per 1,000 ft <sup>2</sup> . Upgrade work would be expected to generate: Hazardous 0-2 metric tons/yr (for 3 years) LLW: 12-24 m <sup>3</sup> /yr (for 3 years, assumes 0.5 to 1 ton/m <sup>3</sup> ) MLLW: 1-2 m <sup>3</sup> /yr (for 3 years, assumes 0.5 to 1 ton/m <sup>3</sup> ) TRU: 0 Municipal Solid Waste: 100 metric tons/yr (for 3 years)
Building 298 Roof Replacement	Replace leaking 47,000 ft <sup>2</sup> roof.	No changes to routine waste generation. Assuming 0.5-foot thick roof, 600 tons of debris would be disposed. Potential for nonroutine TSCA waste. Construction of new roof would result in an estimated several tons of construction debris.
Protection of Real Property (roofs)	Reroof Buildings 111, 113, 121, 141, 194, 231, 241, 251, 281, 321, and 332	No changes to routine waste generation. Assuming 840,000 ft <sup>2</sup> of roof, 0.5 foot thick roof, 10,000 tons of debris would be disposed. Potential for nonroutine TSCA waste. Construction of new roofs would result in estimated tens of tons of construction debris.
Central Cafeteria Replacement	Replace existing temporary central cafeteria.	Due to modernization and consolidation, routine waste generation would be expected to decrease. Construction wastes would be expected, approximately 2 tons/1,000 ft <sup>2</sup> .
BioSafety Level 3 Facility	1,500 ft <sup>2</sup> building to support biological detection/counter-terrorism.	New operation would be expected to generate: Hazardous: 0-1 metric tons/yr (including biohazardous) Municipal Solid Waste: 0-1 metric tons/yr
International Security Research Facility	64,000 ft <sup>2</sup> building to consolidate national security programs.	Due to modernization and consolidation, routine waste generation would be expected to decrease. Construction wastes would be expected, approximately 120 tons.
Container Security Testing Facility	Two small buildings, location.	No changes to routine waste generation. Construction wastes would be expected, approximately 2 tons/1,000 ft <sup>2</sup> .
Site 300 Response Training Facility	Modifying an existing building for assembling and disassembling explosive training devices.	Due to modernization and consolidation, routine waste generation would be expected to decrease. Upgrade construction debris accounted for an estimated 93 to 200 tons of debris per year.

**TABLE 5.2.13.2–2.—Planned Projects Under the No Action Alternative and Associated Waste Projections (continued)**

Project Title	Project Description <sup>a</sup>	Expected Waste Streams and Quantities
National Ignition Facility	Laser system and facility for stockpile stewardship and understanding weapons physics.	Start up of existing capability would be expected to generate the following waste. Hazardous: 15 metric tons per year LLW: 72 m <sup>3</sup> /yr MLLW: 6.9 m <sup>3</sup> /yr Municipal solid waste: several metric tons/yr
WIPP Mobile Vendor	Ship waste to CCF or WIPP	No changes to routine waste generation.
East Avenue Security Upgrade	Limit access along East Avenue to enhance security of LLNL and SNL/CA.	No changes to routine waste generation.
Superblock Security Upgrade	Add physical barriers.	No changes to routine waste generation. Upgrade construction debris accounted for in 93 to 200 tons of debris per year estimate.
D&D Building 514	Existing EPD waste treatment facility to be replaced by DWTF. D&D after startup of DWTF.	No changes to routine waste generation. Potential for nonroutine TSCA waste, mixed, hazardous, and radioactive waste. Moving permitted capacity to DWTF is considered an administrative action and would not result in changes of routine waste generation.
Extend Fifth Street	Improve traffic circulation with east-west connection.	No changes to routine waste generation. Upgrade construction debris accounted for in 93 to 200 tons of debris per year estimate.
Westgate Drive improvements	Widen Westgate Drive and improve circulation.	No changes to routine waste generation. Upgrade construction debris accounted for in 93 to 200 tons of debris per year estimate.
Deactivation and D&D projects	D&D approximately 255,000 ft <sup>2</sup> .	See Table A.2.3–2 waste generation amounts for D&D activities.
Superblock Stockpile Stewardship Program Operations	Several Stockpile Stewardship Programs.	LLW – 460 drums/yr and 10 transportainers/yr TRU – 120 drums/yr and 10 drum overpacks (2/yr) CY 2004 – 20 waste boxes and then 5 waste boxes/yr
Advanced Materials Program	Use of solid state lasers to conduct laser isotope separation experiments.	See Advanced Materials Program CX for estimates (or Appendix N, Integrated Technology Project).
Site Utilities Upgrade	Various upgrades to mechanical utilities, compressed air plant, potable water system, transmission lines.	Only construction debris and noncontaminated solid waste.
Plutonium Facility Ductwork Replacement	Replaces 40-year old glovebox exhaust system.	See glovebox exhaust replacement CX.
SNM Tests with Optical Science Laser	Use of the Optical Science Laser laboratory for an ongoing material study.	Use only encapsulated SNM. No appreciable radioactive waste generations.

Source: LLNL 2002y, TiNUS 2003.

<sup>a</sup> Detailed project descriptions are provided in Appendix A.

Note: SNM tests with Optical Science Laser, Site 300 tritium use, and Advanced Materials Program projects were considered to be modifications of existing processes and not relevant changes impacting waste generation.

ATA = Advanced Test Accelerator; AVLIS = Advanced Vapor Laser Isotope separation; CCF = Central Characterization Facility; CX = categorical exclusion; D&D = Decontamination and Decommissioning; DWTF = Decontamination and Waste Treatment Facility; EPD = Environmental Protection Department; ft<sup>2</sup> = square feet; GBE = lb/yr = pounds per year; LLW = low-level waste; m<sup>3</sup>/yr = cubic meters per year; MLLW = mixed low-level waste; SNM = special nuclear material TRU = transuranic waste; TSCA = *Toxic Substances Control Act*; WIPP = Waste Isolation Pilot Plant.